ABSTRACT

In a time-division duplex (TDD) system, a reliable initialization scheme that is applicable to an automatic gain controller (AGC) at a base station is implemented in various forms depending on the availability of certain information such as signal-to-interference ratio (SIR), spreading factors and other parameters. A more accurate estimation of the initial control word of a gain-adjustable amplifier for one or more time slots is implemented. The scheme is applicable to AGC initialization for each time slot of the TDD system, but is also applicable to other systems of transmission, without limitation.